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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,823	03/29/2004	Jang Hui Cho	46500-000614/US/COA	1001
30593 7590 07/16/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
SHIBRU, HELEN				
ART UNIT		PAPER NUMBER		
2621				
MAIL DATE		DELIVERY MODE		
07/16/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,823

Applicant(s)

CHO ET AL.

Examiner

HELEN SHIBRU

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 9, 11, 14 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 11, 14 and 16-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 05/15/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/15/2009 has been entered.

Response to Amendment

2. The amendments filed on 05/15/2009 have been entered and made of record. Claims 1-4, 9, 11, 14, and 16-38 are pending.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 9, 11, 14, and 16-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 9, 11, 14, and 16-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawabe (US PG PUB 2005/0232111) in view of Yamane (US Pat. No. 6,181,872).

Regarding claim 1, Sawabe discloses a computer-readable medium storing an executable data structure for managing reproduction of at least video data representing multiple reproduction paths by a reproducing apparatus, comprising:

a data area storing a transport stream of at least video data the transport stream being divided into transport packets (see figures 5, 10, 11, 14, and paragraphs 0084, 0297 and 0305 where the prior art teaches video and audio streams are recorded on to DVD, and see also paragraph 0228), a navigation area storing a first navigation unit (see figure 7, PGCI which is recorded on the DVD), the first navigation unit including one or more second navigation units (figure 7 where it shows PGCI including video program #1, video program #2, video program #3) and controlling a reproduction order of the second navigation unit (see paragraph 0097, the information indicating reproduction order is included in the PGCI), at least one second navigation unit referencing more than one map (see figure 7 where the prior art shows video program #2 referencing to video cell #2, video cell #3, and video cell #4), the map identifying transport packets associated with one of the reproduction paths (see figure 7 where it shows the map is associated for one of the files, see also paragraphs 0087, 0096, 0111, cell ID number that identifies the transport packets of specific path), and providing relation information between presentation time and transport packets of the associated reproduction path (see paragraph 0097 where the prior art teaches the PGCI includes information indicating the reproduction order at a time of reproducing and a unique program number is assigned to each program), the at least one second navigation unit including at least one identifier storing the identity of the associated reproduction paths (see figure 7 A_PGCI and audio cell number and paragraph 0111, cell ID number).

Claim 1 differs from Sawabe in that the claim further requires the transport packets of the multiple reproduction paths being interleaved with one another.

In the same field of endeavor Yamane files associated with multiple reproduction paths interleaved with one another (see figures 15, 38, 40 and 45 where the prior art shows interleaved multi-angle connection). Yamane further discloses C_PBI #1 in figure 16 where the C-PBI includes C_FVOBU_SA and C_LVOBU_SA wherein these items includes information start and end address of the video data. Therefore in light of the teaching in Yamane it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sawabe by including interleaved transport packets in order to reproduce split or combined data seamlessly.

Regarding claim 2, Yamane discloses the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis (see figures 38 and 40-41).

Regarding claim 3, Yamane discloses wherein each data block represents at least an intra-coded picture of video data (see figure 54 GOP and col. 22 line 66-col. 23 line 5).

Regarding claim 4, Yamane discloses wherein each data block represents at least one group of pictures (GOP) (see figure 54 GOP).

Claim 9 is rejected for the same reason as discussed in claim 1, and see also Sawabe's figures 10 and 11 where it shows files associated with multi-channel.

Regarding claim 11, the limitation of claim 11 can be found in claim 1 above. Therefore claim 11 is analyzed and rejected for the same reasons as discussed in claim 1 above. It is noted

that Yamane teaches the second navigation unit including a multiple reproduction path flag see figure 51A where it shows VOB_FM =1), the value of the flag indicating that the second navigation units provides navigation information for the multiple reproduction path (for multiple reproduction path, the value of the flag is 1 as shown in figure 51A).

Regarding claim 14, Okada discloses each reproduction path represents one of a digital channel and a sub-channel of an RF channel (see col. 7 lines 54-67 and col. 41 lines 8-28, see also Sawabe paragraph 0359).

Regarding claims 16 and 17, limitation of claims 16 and 17 can be found in claim 1 above. Therefore claims 16 and 17 are analyzed and rejected for the same reason as discussed in claim 1 above.

Regarding claim 18, the limitation of claim 18 can be found in claim 1 above. Therefore claim 18 is analyzed and rejected for the same reasons as discussed in claim 1 above. See also claims 20 and 32 of Sawabe, claim 4 in Yamane. See also figures 14 and 15 in Sawabe and figure 25 in Yamane.

Claim 19 is rejected for the same reason as discussed in claim 18 above.

Regarding claim 20, the limitation of claim 20 can be found in claim 1 above. Therefore claim 20 is analyzed and rejected for the same reason as discussed in claim 1.

Regarding claim 21, Sawabe discloses a number of the third navigation units associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths (see figures 7 and 10).

Regarding claim 22, Yamane discloses at least one of the second navigation units includes a field indicating whether the at least one of the second navigation units provides

navigation information for multiple reproduction paths (see col. 27 lines 6-21 and col. 54 lines 30-48 and see also figure 10 in Sawabe).

Claim 23 is rejected for the same reason as discussed in claim 1 above.

Claims 24, 25 and 26 are rejected for the same reason as discussed in claims 2-3, and 15 respectively above.

Claims 27-29 are rejected for the same reason as discussed in claims 2-3, and 15 respectively above.

Claims 30-32 are rejected for the same reason as discussed in claims 2-3, and 15 respectively above.

Claims 33-35 are rejected for the same reason as discussed in claims 2-3, and 15 respectively above.

Claims 36-38 are rejected for the same reason as discussed in claims 2-3, and 15 respectively above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hamada (US PG PUB 20060062547), Sasamoto (US PG PUB 2005/0025458), and Manabu (US PG PUB 20050180289) teach cell id is obtained by referring to map.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621